

L1 ANSWER 198 OF 301 CA COPYRIGHT 2006 ACS on STN

AN 106:125030 CA

ED Entered STN: 17 Apr 1987

TI High-strength cement composition

IN Sakai, Etsuro; Shibayama, Yukio

PA Denki Kagaku Kogyo K. K., Japan

SO Jpn. Kokai Tokkyo Koho, 5 pp.

CODEN: JKXXAF

DT Patent

LA Japanese

IC ICM C04B028-02

ICI C04B028-02, C04B022-06, C04B024-22

CC 58-3 (Cement, Concrete, and Related Building Materials)

FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	JP 61178462	A2	19860811	JP 1985-19292	19850205
PRAI	JP 1985-19292			19850205	

CLASS

PATENT NO.	CLASS	PATENT FAMILY CLASSIFICATION CODES
JP 61178462	ICM	C04B028-02
	ICI	C04B028-02, C04B022-06, C04B024-22
	IPCI	C04B0028-02 [ICM,4]; C04B0028-02 [ICI,4]; C04B0022-06 [ICI,4]; C04B0024-22 [ICI,4]

AB In a high-strength cement composition containing cement, ultrafine powder, high-performance water-reducing agent, and water, crushed opal-based siliceous rock, blast-furnace slag, or fly ash is used as the ultrafine powder and this reduces the shrinkage during its hardening. Thus, a test piece manufactured from a raw mix containing cement 80, fly ash (mean particle size  $3.04\mu$ ) 20, sand 120, high-performance water-reducing agent 2, and water  $\geq 1$  weight parts had compressive strength 1423 kg/cm<sup>2</sup> and hardening shrinkage 1.4%.

ST fly ash mortar hardening shrinkage; blast furnace slag mortar hardening shrinkage; silica powder mortar hardening shrinkage

IT Ashes (residues)

(coal fly, mortar from cement and, with low hardening shrinkage)

IT Mortar

(from cement with fly ash or siliceous rock or blast-furnace slag, with low hardening shrinkage)

IT Slags

(blast-furnace, mortar from cement and, with low hardening shrinkage)

IT 7631-86-9, Silica, uses and miscellaneous

RL: USES (Uses)

(powder, mortar from cement and, with low hardening shrinkage)

Cement  
- fly ash (3.04  $\mu$  mean particle size)  
- water reducing agt  
- water